

the Secretary shall use the authority granted to the Secretary by sections 53, 63, and 161 g. of the Atomic Energy Act of 1954 (42 U.S.C. 2073, 2093, 2201(g)).

(c) **PURPOSES.**—The purposes of the Uranium Reserve are—

(1) to address domestic nuclear supply chain issues;

(2) to provide assurance of the availability of uranium recovered in the United States in the event of a supply disruption; and

(3) to support strategic nuclear fuel cycle capabilities in the United States.

(d) **EXCLUSION.**—The Secretary shall exclude from the Uranium Reserve uranium that is recovered in the United States by an entity that—

(1) is owned or controlled by the Government of the Russian Federation or the Government of the People's Republic of China; or

(2) is organized under the laws of, or otherwise subject to the jurisdiction of, the Russian Federation or the People's Republic of China.

(e) **FUNDING.**—Notwithstanding any other provision of this Act, out of any amounts appropriated pursuant to section 2117(a), there shall be made available to the Secretary to carry out this section \$150,000,000 for each of fiscal years 2022 through 2026.

SA 1533. Mr. BARRASSO submitted an amendment intended to be proposed to amendment SA 1502 proposed by Mr. SCHUMER to the bill S. 1260, to establish a new Directorate for Technology and Innovation in the National Science Foundation, to establish a regional technology hub program, to require a strategy and report on economic security, science, research, innovation, manufacturing, and job creation, to establish a critical supply chain resiliency program, and for other purposes; which was ordered to lie on the table; as follows:

At the end of subtitle A of title I of division C, add the following:

SEC. 3102. ADDRESSING RISK POSED BY CERTAIN COUNTRIES WITH RESPECT TO RESEARCH AND DEVELOPMENT.

(a) **DEFINITIONS.**—In this section:

(1) **COUNTRY OF RISK.**—

(A) **IN GENERAL.**—The term “country of risk” means a foreign country the Secretary of Energy determines to present a risk of theft of United States intellectual property or a threat to the national security of the United States if nationals of the country participate in any research, development, demonstration, or deployment activity authorized under this Act or an amendment made by this Act.

(B) **CONSULTATIONS AND CONSIDERATIONS.**—In making determinations with respect to countries of risk under subparagraph (A), the Secretary shall—

(i) consult with the Director, the Director of the Office of Science and Technology Policy, and the National Security Council; and

(ii) take into consideration—

(I) the most recent World Wide Threat Assessment of the United States Intelligence Community, prepared by the Director of National Intelligence; and

(II) the most recent National Counterintelligence Strategy of the United States.

(2) **NATIONAL.**—The term “national” has the meaning given that term in section 101 of the Immigration and Nationality Act (8 U.S.C. 1101).

(3) **SECRETARY.**—The term “Secretary” means the Secretary of Energy.

(b) **SCIENCE AND TECHNOLOGY RISK MATRIX.**—

(1) **IN GENERAL.**—The Secretary, in coordination with the Director and the Director of the Office of Science and Technology Policy, shall develop and maintain a Science and Technology Risk Matrix for any research, development, demonstration, or deployment activity authorized under this Act or an amendment made by this Act to facilitate determinations of the risk of theft of United States intellectual property or threat to the national security of the United States posed by each such activity.

(2) **CONTENT AND IMPLEMENTATION.**—The matrix developed under paragraph (1) shall be developed, maintained, and used in a manner consistent with Department of Energy Order 142.3B (as in effect on the day before the date of the enactment of this Act).

(c) **PROHIBITION ON NATIONALS OF COUNTRIES OF RISK PARTICIPATING IN RESEARCH AND DEVELOPMENT ACTIVITIES.**—

(1) **IN GENERAL.**—A national of a country of risk may not participate in any research, development, demonstration, or deployment activity authorized under this Act or an amendment made by this Act.

(2) **PENALTIES.**—Any person that receives funds authorized to be appropriated or otherwise made available by this Act that is found to be in violation of paragraph (1) shall be prohibited from receiving Federal funding for a period of 10 years after being found in violation of paragraph (1).

(d) **ENTITY OF CONCERN PROHIBITION.**—

(1) **IN GENERAL.**—No entity described in paragraph (2) or person affiliated with such an entity may receive or participate in any grant, award, program, support, or other activity authorized under this Act or an amendment made by this Act.

(2) **ENTITIES DESCRIBED.**—An entity described in this paragraph is any entity—

(A) identified under section 1237(b) of the Strom Thurmond National Defense Authorization Act for Fiscal Year 1999 (Public Law 105-261; 50 U.S.C. 1701 note);

(B) identified under section 1260H of the William M. (Mac) Thornberry National Defense Authorization Act for Fiscal Year 2021 (Public Law 116-283); or

(C) on the Entity List maintained by the Bureau of Industry and Security of the Department of Commerce and set forth in Supplement No. 4 to part 744 of title 15, Code of Federal Regulations.

(e) **REPORT REQUIRED.**—Not later than 240 days after the date of the enactment of this Act, the Secretary and the Director shall jointly submit to Congress a report that—

(1) describes—

(A) the extent to which nationals of countries of risk are participating in research and development activities of the Department of Energy or the Foundation; and

(B) the disciplines of those research and development activities;

(2) includes a mitigation plan for ensuring nationals of countries of risk do not participate in any future or ongoing research and development activities of the Department of Energy or the Foundation; and

(3) defines critical research areas, classified by risk, as determined by the Secretary and the Director.

SA 1534. Mr. BARRASSO submitted an amendment intended to be proposed to amendment SA 1502 proposed by Mr. SCHUMER to the bill S. 1260, to establish a new Directorate for Technology and Innovation in the National Science Foundation, to establish a regional technology hub program, to require a strategy and report on economic security, science, research, innovation, manufacturing, and job creation, to es-

tablish a critical supply chain resiliency program, and for other purposes; which was ordered to lie on the table; as follows:

At the end of subtitle C of title I of division C, add the following:

SEC. 3124. PROHIBITION ON IMPORTATION OF POWER INVERTERS FROM COUNTRIES FROM WHICH CYBERATTACKS ON UNITED STATES CRITICAL ENERGY INFRASTRUCTURE ORIGINATE.

(a) **REPORT REQUIRED.**—Not later than 180 days after the date of the enactment of this Act, the Secretary of Energy, in consultation with the Director of National Intelligence, the Secretary of Homeland Security, and the Secretary of Commerce, shall submit to the appropriate congressional committees a report identifying each country—

(1) for which there is reason to believe that cyberattacks on critical energy infrastructure in the United States have originated in that country during any of the 3 calendar years preceding the submission of the report and such cyberattacks have persisted after notification to that country; and

(2) in which power inverters are manufactured or assembled that are imported into the United States.

(b) **PROHIBITION ON IMPORTATION.**—On and after the date that is 60 days after the submission of the report required by subsection (a), the importation of power inverters from any country identified in the report is prohibited.

(c) **APPROPRIATE CONGRESSIONAL COMMITTEES DEFINED.**—In this section, the term “appropriate congressional committees” means—

(1) the Committee on Energy and Natural Resources, the Committee on Homeland Security and Governmental Affairs, the Committee on Commerce, Science, and Transportation, and the Select Committee on Intelligence of the Senate; and

(2) the Committee on Energy and Commerce, the Committee on Natural Resources, the Committee on Homeland Security, and the Permanent Select Committee on Intelligence of the House of Representatives.

SA 1535. Mr. BARRASSO (for himself, Mr. DAINES, Ms. MURKOWSKI, and Ms. LUMMIS) submitted an amendment intended to be proposed to amendment SA 1502 proposed by Mr. SCHUMER to the bill S. 1260, to establish a new Directorate for Technology and Innovation in the National Science Foundation, to establish a regional technology hub program, to require a strategy and report on economic security, science, research, innovation, manufacturing, and job creation, to establish a critical supply chain resiliency program, and for other purposes; which was ordered to lie on the table; as follows:

At the end of title III of division F, add the following:

SEC. 63. TECHNOLOGY GRANTS TO STRENGTHEN DOMESTIC MINING WORKFORCE.

(a) **DEFINITIONS.**—In this section:

(1) **BYPRODUCT.**—The term “byproduct” has the meaning given the term in section 7002(a) of the Energy Act of 2020 (30 U.S.C. 1606(a)).

(2) **CRITICAL MINERAL.**—The term “critical mineral” has the meaning given the term in section 7002(a) of the Energy Act of 2020 (30 U.S.C. 1606(a)), except that the term shall not exclude materials described in paragraph (3)(B)(iii) of that section.

(3) **MINING SCHOOL.**—The term “mining school” means—

(A) a mining, metallurgical, or mineral engineering program or department accredited by the Accreditation Board for Engineering and Technology, Inc. that is located at an institution of higher education (as defined in section 101 of the Higher Education Act of 1965 (20 U.S.C. 1001)); and

(B) a geology or engineering program or department that is located at an institution of higher education (as so defined) located in a State the gross domestic product of which in 2020 was not less than \$1,000,000,000 in the category "Mining, quarrying, and oil & gas extraction", according to the Bureau of Economic Analysis.

(4) SECRETARY.—The term "Secretary" means the Secretary of Energy.

(5) STATE.—The term "State" means—

- (A) a State;
- (B) the District of Columbia;
- (C) the Commonwealth of Puerto Rico;
- (D) Guam;
- (E) American Samoa;
- (F) the Commonwealth of the Northern Mariana Islands; and
- (G) the United States Virgin Islands.

(b) GRANT PROGRAM.—

(1) IN GENERAL.—The Secretary, in coordination with the Secretary of the Interior, shall establish a competitive grant program under which the Secretary shall award grants to mining schools.

(2) USE OF FUNDS.—A mining school receiving a grant under paragraph (1) shall use the grant funds to carry out a study, research project, or demonstration project relating to the production of critical minerals, including relating to—

(A) enhancing and supporting mining and mineral engineering programs at mining schools;

(B) mining, mineral extraction efficiency, and related processing technology;

(C) reclamation technology and practices for active mining operations;

(D) the development of remining systems and technologies that facilitate reclamation that fosters the recovery of resources at abandoned mine sites;

(E) critical mineral extraction methods that reduce environmental and human impacts;

(F) technologies to extract, refine, separate, melt, or produce rare earth elements;

(G) reducing dependence on foreign energy and mineral supplies through increased domestic critical mineral production;

(H) enhancing the competitiveness of United States energy and mineral technology exports;

(I) the extraction or processing of coinciding mineralization, including rare earth elements, within coal, coal processing by-product, overburden or coal residue;

(J) enhancing technologies and practices relating to mitigation of acid mine drainage, reforestation, and revegetation in the reclamation of land and water resources adversely affected by mining;

(K) enhancing exploration and characterization of new or novel deposits, including rare earth elements and critical minerals within phosphate rocks, uranium bearing deposits, and other non-traditional sources;

(L) meeting challenges of extreme mining conditions, such as deeper deposits or offshore or cold region mining; and

(M) mineral economics, including analysis of supply chains, future mineral needs, and unconventional mining resources.

(c) PUBLIC PARTICIPATION.—In carrying out this section, the Secretary shall—

(1) consult with relevant stakeholders; and

(2) provide to undergraduate and graduate students at mining schools significant opportunities for participation.

(d) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to

carry out this section \$10,000,000 for each of fiscal years 2022 through 2026.

SA 1536. Mr. BARRASSO (for himself, Ms. MURKOWSKI, and Ms. LUMMIS) submitted an amendment intended to be proposed to amendment SA 1502 proposed by Mr. SCHUMER to the bill S. 1260, to establish a new Directorate for Technology and Innovation in the National Science Foundation, to establish a regional technology hub program, to require a strategy and report on economic security, science, research, innovation, manufacturing, and job creation, to establish a critical supply chain resiliency program, and for other purposes; which was ordered to lie on the table; as follows:

At the end of title III of division C, add the following:

SEC. 3314. GLOBAL COOPERATIVE FRAMEWORK TO END HUMAN RIGHTS ABUSES IN SOURCING CRITICAL MINERALS.

(a) IN GENERAL.—The Secretary of State shall seek to convene a meeting of foreign leaders to establish a multilateral framework to end human rights abuses, including the exploitation of forced labor and child labor, related to the mining and sourcing of critical minerals.

(b) CERTIFICATION SCHEME.—The Secretary shall seek to ensure that the framework under subsection (a) includes a certification scheme, comprised of—

(1) minimum requirements for national legislation, institutions, and import and export controls related to the sourcing of critical minerals;

(2) measures to enforce transparency in the exchange of production, transportation, and end-use manufacturing data related to critical minerals, including through the use of blockchain technology, if feasible;

(3) prohibitions on the purchase or trade in critical minerals unless parties to the purchase or trade are certified under and in compliance with the framework; and

(4) measures to certify shipments as in compliance with the framework, including requiring the provision of supporting documentation.

(c) IMPLEMENTATION REPORT.—The Secretary shall lead the development of an annual global report on the implementation of the framework under subsection (a), including progress and recommendations to fully end human rights abuses, including the exploitation of forced labor and child labor, related to the extraction of critical minerals around the world.

(d) REVIEW OF CONFLICT MINERALS LIST.—The Secretary shall review the list of conflict minerals under section 1502(e)(4) of the Dodd-Frank Wall Street Reform and Consumer Protection Act (Public Law 111-203; 124 Stat. 228) to determine whether certain critical minerals, such as cobalt, should be included on the list.

(e) CRITICAL MINERAL DEFINED.—In this section, the term "critical mineral" has the meaning given the term in section 7002(a) of the Energy Act of 2020 (division Z of Public Law 116-260; 30 U.S.C. 1606(a)).

SA 1537. Mr. BARRASSO submitted an amendment intended to be proposed to amendment SA 1502 proposed by Mr. SCHUMER to the bill S. 1260, to establish a new Directorate for Technology and Innovation in the National Science Foundation, to establish a regional technology hub program, to require a strategy and report on economic security, science, research, innovation,

manufacturing, and job creation, to establish a critical supply chain resiliency program, and for other purposes; which was ordered to lie on the table; as follows:

At the end of division F, add the following:

TITLE IV—AMERICAN CRITICAL MINERAL INDEPENDENCE

SEC. 6401. DEFINITIONS.

In this title:

(1) BYPRODUCT.—The term "byproduct" has the meaning given the term in section 7002(a) of the Energy Act of 2020 (30 U.S.C. 1606(a)).

(2) CRITICAL MINERAL.—The term "critical mineral" has the meaning given the term in section 7002(a) of the Energy Act of 2020 (30 U.S.C. 1606(a)), except that the term shall not exclude materials described in paragraph (3)(B)(iii) of that section.

(3) CRITICAL MINERAL PROJECT.—The term "critical mineral project" means a project—

- (A) located on—
 - (i) a mining claim, millsite claim, or tunnel site claim for any locatable mineral;
 - (ii) land open to mineral entry; or
 - (iii) a Federal mineral lease; and
- (B) for the purpose of producing a critical mineral, including—

(i) as a byproduct, or a product of a host mineral, or from tailings; or

(ii) through an exploration project with respect to which the presence of a byproduct is a reasonable expectation, based on known mineral companionship, geologic formation, mineralogy, or other factors.

(4) INDIAN TRIBE.—The term "Indian Tribe" has the meaning given the term in section 4 of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 5304).

(5) LEAD AGENCY.—The term "lead agency" means the agency with primary responsibility for issuing a mineral exploration or mine permit for a project.

(6) MINERAL EXPLORATION OR MINE PERMIT.—The term "mineral exploration or mine permit" means—

(A) an authorization of the Bureau of Land Management or the Forest Service, as applicable, for a premining activity that requires analysis under the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.);

(B) a plan of operations issued by the Bureau of Land Management or the Forest Service; and

(C) a permit for a project located in an area for which a hardrock mineral permit or lease is available.

(7) SECRETARY.—The term "Secretary" means the Secretary of Energy.

(8) STATE.—The term "State" means—

- (A) a State;
- (B) the District of Columbia;
- (C) the Commonwealth of Puerto Rico;
- (D) Guam;
- (E) American Samoa;
- (F) the Commonwealth of the Northern Mariana Islands; and
- (G) the United States Virgin Islands.

Subtitle A—Rare Earth Elements and Critical Minerals Processing Technologies

SEC. 6411. RARE EARTH ELEMENTS AND CRITICAL MINERALS PROCESSING TECHNOLOGIES.

(a) RESEARCH PROGRAM FOR THE RECOVERY OF CRITICAL MINERALS.—

(1) IN GENERAL.—The Secretary, in consultation with the Secretary of the Interior, shall carry out a grant program to research, develop, and assess advanced processing technologies and techniques for—

(A) the extraction, refining, separation, melting, or production of critical minerals, including rare earth elements; and

(B) the extraction of critical minerals, including rare earth elements, from various